

## EMI CANCELLATION METHOD AND SYSTEM

### ABSTRACT OF THE DISCLOSURE

[0048] In an EMI canceller, a control signal generation unit includes a counter, a second flip-flop, and a multiplexer. The counter outputs first and second output signals and includes first flip-flops in series. An output of the first flip-flop reverses at every cycle of the first and second output signals of a previous first flip-flop. An output of the second flip-flop reverses at every cycle of the first or second output signal of a final first flip-flop. The second flip-flop outputs third and fourth output signals. The multiplexer passes the first output signals of the first flip-flop as a control signal when the third output signal is a first level, and passes the second output signals as the control signal when it is a second level.